



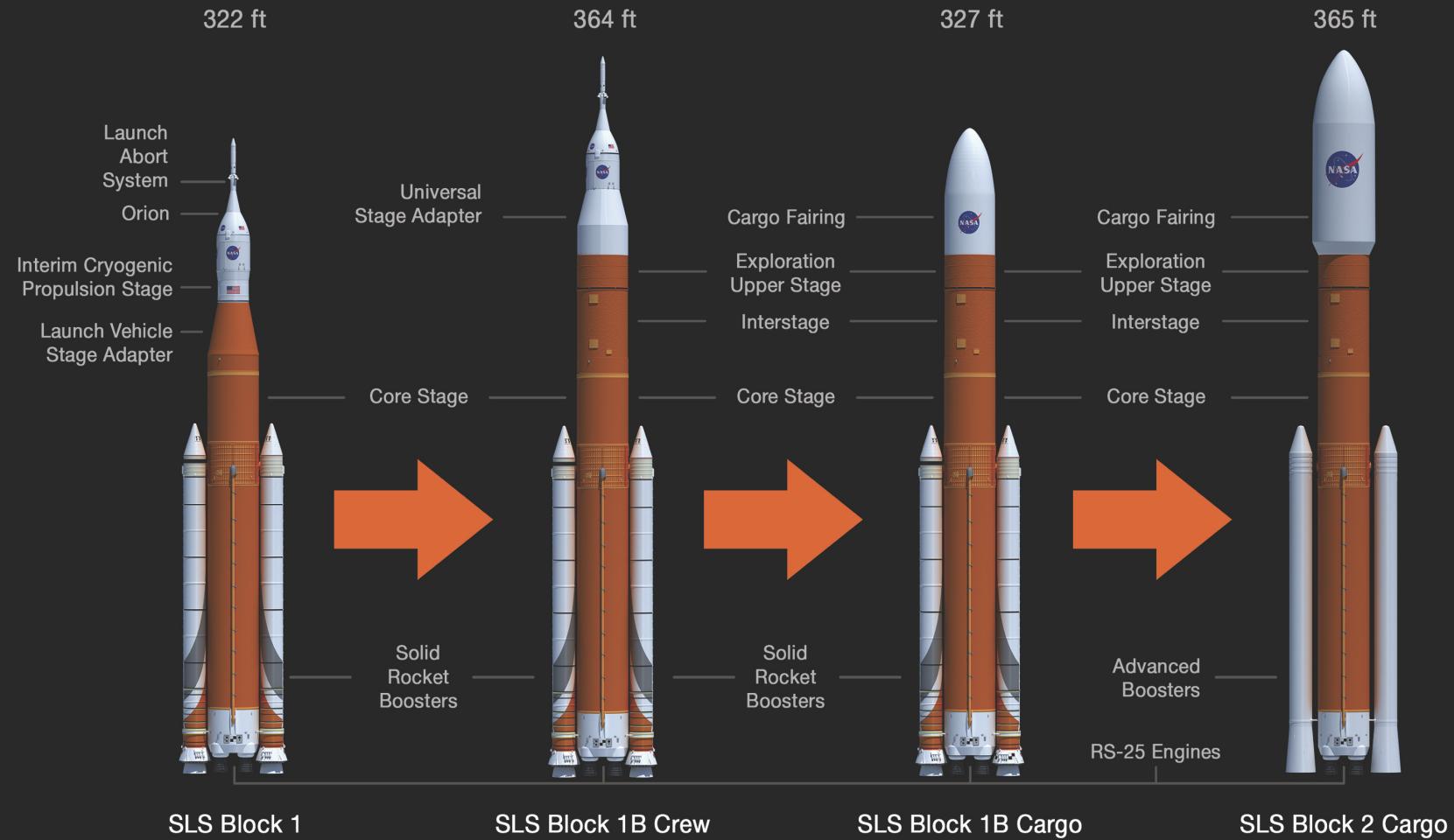
Tech Talk



Configuration Items
“An SLS Case Study”

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SLS Top Configuration Item Blocks



10000 (EM-1) Vehicle Integrated Launch System Drawing Tree And Installation Drawing Assignments

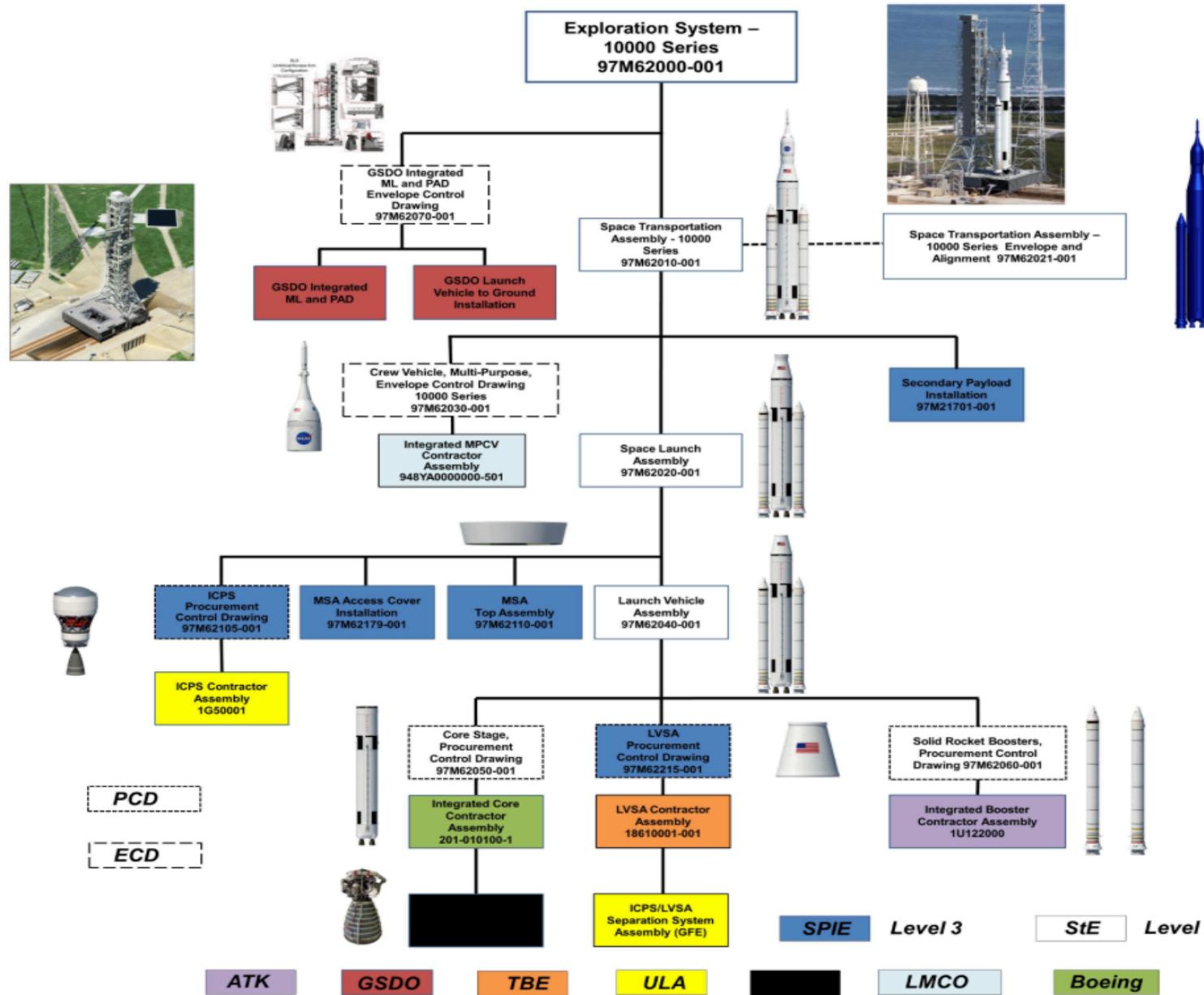


Table C-0. Exploration System (ES) Configurations – Overview

Table C-1. Exploration System (ES) 10000-Series CIs Related to ES Integrated Design Release by SLSP

CI Name [CI Number]	End Use	Units	NASA B/L Control	Primary Requirements – NASA B/L	Design Activity	Top Assy No.*	CI-Effectivity for Part Release by Design Activity	
							CI No.	Effectivities
Exploration System 10000 Series [ES-10000]	Flight	1	ESD JICB	97M62000, Exploration System – 10000 Series 97M62070-001, GSDO Integrated ML and Pad Envelope Control Drawing	MSFC	97M62000-001	ES-10000	001
ES Space Transportation System [ES-ST-10000]	Flight	1	ESD JICB	SLS-SPEC-028, SLSP Integrated Vehicle Structural Design Specification MPCV 70026, Orion MPCV Program to SLS Program Interface Requirements Document (IRD) SLS-ICD-052-01, SLSP-to-GSDOP ICD, Volume 1: Functional Interface Definition & SLSP Integrated Vehicle-to-GSDOP Detailed Design 97M62010, Space Transportation Assembly 97M62021, Integrated Launch Vehicle Assembly Envelope and Alignment Drawing 97M62030, MPCV Procurement Control Drawing 97M62070-001, GSDO Integrated ML and Pad Envelope Control Drawing 97M21701-001, Secondary Payload Deployer Integration	MSFC	97M62010-001	ES-10000	001

Column Descriptions

CI NAME

The descriptive name of the CI. In Tables C-1 and C-2, the CI name matches the nomenclature from the Product Breakdown Structure for the Block 1 SLS System, except that “10000 Series” has been used instead of “Block 1” to be more consistent with the SLS Launch Vehicle assembly drawings nomenclature.. The series designation (e.g., 10000) has been included in the CI name for CIs that are designed specifically for the 10000-series (flight or ground). For CIs that may be utilized in multiple series, the series designation has not been included in the CI Name.

CI NUMBER

The unique number assigned to the CI using the following general format: for vehicle configuration-specific CIs: Program-Vehicle-Configuration-Element-Component-Usage; for multi-vehicle usage CIs: Program-Element-Component-Usage. The CI number will be utilized in the CM accounting database to relate the CI to its baselined documentation, and the CI number is used as the effectivity context when release effectivity is assigned to parts.

END USE

The intended use of the CI – Flight (FLT), Qualification (QUAL), or Ground (other categories can be added).

UNITS

The number of units planned for the 10000 series.

NASA B/L CONTROL

The group that has control authority over the CI requirements in the configuration baselines.

PRIMARY REQUIREMENTS–NASA B/L

A list of the CI's primary requirements documentation in the configuration baselines.

DESIGN ACTIVITY

The organization that has responsibility for the CI detailed design and administers the release system for the detailed design documentation (drawings, parts lists, CAD models, etc.).

TOP ASSY NO.

The drawing or part number of the top assembly of the CI.

CI-EFFECTIVITY FOR PART RELEASE BY DESIGN ACTIVITY

The effectivity of the part release is made up of the CI and Effectivity identifiers. The CI- effectivity can be used to retrieve the authorized configuration. Authorization for a part to be included in a configuration is done through application of CI-effectivity when the part is released. A part can be assigned multiple effectivities.

CONFIGURATION ITEM (CI) AND EFFECTIVITY LIST (EFFECTIVITY SHEET)

PROJECT NAME & ACRONYM		DOCUMENT NUMBER	REVISION	DATE	PAGE
Space Launch System (SLS) Ground Support Equipment (GSE)		N/A	D	2/24/17	2 OF 5

CI NUMBER OR PROJECT CODE	EFFECTIVITY UNITS OR CODE	TOP ASSEMBLY PART NUMBERS & NAMES	NUMBER OF UNITS & APPLICATION	USAGE/GENERAL DESCRIPTION	DESIGN ACTIVITY	REV OR DATE CHANGED
SLS-GSE-MPC	0001	97M57700-005, PLATFORM ASSEMBLY, MULTI-PURPOSE CARRIER (MPC), TALL LEGS	2	SLS CS, CS STA, other as needed	ES21	C
SLS-GSE-MPTS	0001	97M57610-001, STA TO MPTS INSTALLATION, INTERTANK	1	SLS CS STA: IT	ES21	C
SLS-GSE-MPTS	0001	97M57613-001, STA TO MPTS INSTALLATION , LH2	1	SLS CS STA: LH2	ES21	C
SLS-GSE-MPTS	0001	97M57614-001, STA TO MPTS INSTALLATION, LOX	1	SLS CS STA: LOX	ES21	C
SLS-GSE-MPTS	0001	97M57615-001, MPTS ASSY, LOCKED		SLS CS STAs: IT, LH2, LOX		C
SLS-GSE-MPTS	0001	97M57615-003, MPTS ASSY, FREED		SLS CS STAs: IT, LH2, LOX		C
SLS-GSE-MPTS	0001	97M57810-001, STA TRANSPORTATION BRACKETS, INSTALLATION DRAWING, HIS	4	SLS CS STAs: IT, LH2, LOX	ES21	C
SLS-GSE-MPTS	0001	97M57811-001, STA TRANSPORTATION BRACKETS, KIT DRAWING, HIS	2	SLS CS STAs: IT, LH2, LOX	ES21	C
SLS-GSE-MPTS-CS	0001	97M57617-001, CS, FWD MPTS	2	SLS CS	ES21	C
SLS-GSE-MPTS-CS	0001	97M57618-001, CS, AFT MPTS	2	SLS CS	ES21	C
SLS-GSE-MPTS-CS	0001	97M57620, INSTALLATION, CS TO MPTS		SLS CS	ES21	C
SLS-GSE-SP	0001	97M58257-001, SPIDER ASSEMBLY, FORWARD LIFTING	2	SLS CS	ES21	A

CI NUMBERS AND NAMES	
SLS-GSE, SLS GSE General	SLS-GSE-MPC, SLS GSE Multi-Purpose Carrier
SLS-GSE-ALE, SLS GSE Aft Lifting Equipment	SLS-GSE-MPTS, SLS GSE Multi-Purpose Transportation System
SLS-GSE-EB, SLS GSE Engine Section Lifting Beam	SLS-GSE-MPTS, SLS GSE Multi-Purpose Transportation System, Core Stage
SLS-GSE-FLE, SLS GSE Forward Lifting Equipment	SLS-GSE-SP, SLS GSE Core Stage Forward Lifting Spider
SLS-GSE-ARB, SLS GSE Aft Restraint Bracket	

ACRONYMS			
ALE: Aft Lifting Equipment	IT: Intertank	MPTS: Multi-Purpose Transportation System	
ARB: Aft Restraint Bracket	KSC: Kennedy Space Center	SP: GSE Lifting Spider	
CS: Core Stage	LH2: Liquid Hydrogen Tank	SSC: Stennis Space Center	
EB: Engine Section Lifting Beam	LOX: Liquid Oxygen Tank	STA: Structural Test Article	
ES: Engine Section	MPC: Multi-Purpose Carrier		
FLE: Forward Lifting Equipment			
GSE: Ground Support Equipment			